

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008660**Date Inspected:** 21-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BW/5CW

This QA Inspector observed Submerged Arc Welding (SAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5-013, 012, 014. The welder is identified as #054458 and 049804 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-P-2221-B-L2A-S-3.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-014, 015. The welder is identified as #220069 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5-015. The welder is identified as #220067 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

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### Segment 1AAW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG1E-875, 974, 843. The welder is identified as #220063 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-T-2234-C-U2-F for CWR666.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD34A-PP8.5-073, 075, 081, 123. The welder is identified as #220063 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-T for CWR667.

### Segment 1BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as SP342-001-029, 031, 035. The welder is identified as #067707 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

### Segment 2AW

This QA Inspector observed grinding of repair welds at the floor beam diaphragm to floor beam connection along panel point 16.

This QA Inspector observed drilling of bolt holes on the deck plate stiffener plates for the segment to cross beam bolted splice connection

### Segment 1AE/1AAE

This QA Inspector observed grinding of the side plate CJP transverse splice weld at areas marked after ZPMC VT inspection.

### Segment 3AW

This QA Inspector observed blasting in progress at bottom plate and FL3 bolted connection locations.

### Segment 4AW

This QA Inspector observed blasting in progress at bottom plate and FL3 bolted connection locations.

### Segment 5CW

This QA Inspector observed the removal of the fillet weld by grinding on the short LD to bottom plate connection at panel point 35, cross beam side.

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ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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